

international revenues equal to their interstate revenues be a more equitable approach in today's marketplace? Would the modification proposed above reduce the potential regulatory advantage that LIRE-qualifying providers have over their competitors? What impact would such a modification have on the Fund?

207. We also seek comment on whether we should set the LIRE-qualifying factor based upon a formula rather than fixed percentage. A fixed percentage assumes that the Commission can easily forecast changes in the contribution base as well as changes in the demand for universal service support. Neither of these assumptions has been valid in recent years. The Commission has already had to increase the LIRE-qualifying factor once to respond to the rising contribution factor.<sup>349</sup> Using a formula to establish the LIRE-qualifying factor should eliminate the need for us to periodically rewrite our rules. Moreover, a formula tied to the current contribution factor would also respond to changes in the contribution factor. If, for example, future events bring the contribution factor down, the LIRE-qualifying factor would automatically decrease in future years, which should increase the contribution base. Should we set the LIRE-qualifying factor one year at a time to provide regulatory certainty for contributors? A three percent increase tied to the current or anticipated contribution factor is generally in line with previous increases to the LIRE.<sup>350</sup> Would a three percent increase, for example, over the previous year's highest contribution factor, be sufficient to address unexpected events in the future?<sup>351</sup>

208. We seek comment on what steps would need to be taken to implement the potential modifications outlined above or alternative proposals to modify the contribution requirements for international-only and predominantly international providers. We also seek comment on how much time parties would need to transition to any modified or new reporting requirements.

## 7. Reforming the *De Minimis* Exemption

209. In this section, we seek comment on streamlining the *de minimis* exemption to ease administrative burdens. In particular, we seek comment on whether we should modify the *de minimis* exemption to base the threshold on a provider's assessable revenues rather than on the amount of its contributions. We also seek comment on how we could potentially reform our rules to minimize the filing requirements for companies that may be subject to the exemption.

210. *Background.* The Act gives the Commission authority to exempt a carrier from contributing to universal service if the carrier's telecommunications activities "are limited to such an extent that the level of such carrier's contribution to the preservation and advancement of universal service would be *de minimis*."<sup>352</sup> Accordingly, our rules exempt from contribution any telecommunications provider whose "contribution to universal service in any given year is less than \$10,000."<sup>353</sup> These *de minimis* telecommunications providers also are not required to file the

<sup>349</sup> 2002 First Contribution Methodology Order and FNPRM, 17 FCC Rcd at 3806-07, paras. 123-128.

<sup>350</sup> When the Commission established the LIRE at 8 percent in 1999, the universal service contribution factor was 5.8995 percent. In 2002, when the Commission raised the LIRE to 12 percent, the contribution factor had risen to 6.808 percent, and the Commission anticipated that it would exceed 8 percent for the year. See 2002 First Contribution Methodology Order and FNPRM, 17 FCC Rcd at 3806, para. 125.

<sup>351</sup> Although we anticipate that the contribution factor will be less likely to increase above that year's LIRE-qualifying factor if we use a formula rather than a fixed percentage, the Commission's waiver rules would remain in effect even with revision of the LIRE, as discussed herein. See 47 C.F.R. § 1.3.

<sup>352</sup> 47 U.S.C. § 254(d).

<sup>353</sup> 47 C.F.R. § 54.708.

Telecommunications Reporting Worksheet unless required by our rules governing contributions to other federal regulatory programs.<sup>354</sup>

211. In 2010, about 55 percent of all Telecommunications Reporting Worksheet filers qualified for the *de minimis* exemption; absent that exemption, 1,708 additional filers would have been required to contribute to universal service directly.<sup>355</sup> We estimate that, during that same year, 96 percent of the financial benefits of the *de minimis* exemption went to the largest 1,020 *de minimis* telecommunications filers, all of whom would have contributed more than \$1,000 to universal service that year.<sup>356</sup>

212. Today's *de minimis* exemption creates administrative burdens and uncertainty for many qualifying providers and USAC.<sup>357</sup> Specifically, tying *de minimis* status to a telecommunications provider's annual contribution amount means that some providers cannot project with reasonable certainty whether or not they will qualify as *de minimis* each year until mid-September, when the Commission announces the fourth-quarter contribution factor.<sup>358</sup> Because of this uncertainty, many telecommunications providers close to the existing *de minimis* threshold must file the quarterly Telecommunications Reporting Worksheet and contribute on a quarterly basis out of precaution—if a provider fails to do so and it turns out not to qualify for the exemption, it faces late filing fees, penalties, and other sanctions.<sup>359</sup> Moreover, the uncertainty caused by today's *de minimis* exemption extends beyond potentially qualifying entities to any providers from which they purchase telecommunications—if the potentially qualifying provider turns out to be *de minimis*, then the underlying provider should have contributed on its revenues from sales to that provider; if not, then the underlying provider has no such obligation.

213. *Discussion.* We seek comment on whether we should modify the Commission's *de minimis* rules in an effort to reduce administrative burdens. Specifically, we seek comment on revising the rule as follows to base the *de minimis* threshold on a provider's assessable revenues rather than on the amount of its contributions:

*If a potential contributor's annual assessable revenues in any given year is \$50,000 or less, that contributor will not be required to submit a contribution or Telecommunications Reporting Worksheet for that year unless it is required to do*

---

<sup>354</sup> *Id.*

<sup>355</sup> The 55 percent includes 1,920 filers that reported no revenue. This information was calculated based on a review of the Telecommunications Reporting Worksheets filed in April 2011.

<sup>356</sup> *De minimis* telecommunications providers may indirectly contribute to the universal service support mechanisms through contribution pass through charges that they pay to their wholesale providers. *De minimis* telecommunications providers still benefit from the exemption, however, because their wholesale provider only contributes on *its* (wholesale) revenues rather than the *de minimis* telecommunications provider's (retail) revenues.

<sup>357</sup> See, e.g., Letter from L. Charles Keller, Counsel for Network Enhanced Telecom LLP, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 06-122, Attach. at 7 (filed Aug. 19, 2010) ("It is very difficult for these [*de minimis*] carriers to determine, in a forward-looking way, whether they will be *de minimis* for the coming year . . .").

<sup>358</sup> For example, assume that a provider projects that it will collect \$14,500 each quarter in assessable revenues. If the provider assumes that the contribution factor will remain constant throughout this next year at its current level (17.4%), the provider's contribution obligation would be \$10,092 and the provider would not qualify as *de minimis*. If the contribution factor drops to 17%, however, the provider's calculated obligation would drop to \$9,860 and the provider would not need to contribute at all.

<sup>359</sup> 47 C.F.R. § 54.708.

*so by our rules governing TRS, numbering administration, or shared costs of local number portability. ...*

*A potential contributor may—but need not—file the quarterly Telecommunications Reporting Worksheet for the year after it qualifies as a de minimis telecommunications provider.*

214. Such a rule would set the *de minimis* threshold based on a telecommunications provider's assessable revenues rather than what it would have contributed. A potentially qualifying telecommunications provider (and its underlying providers) should know with increased certainty whether it will actually qualify as a *de minimis* telecommunications provider as the exemption will no longer depend on each year's quarterly contribution factors. We seek comment on this analysis.

215. If we adopt this approach, is \$50,000 the right cutoff for assessable revenues to qualify for the *de minimis* exemption, or should we adopt some other cutoff? We use \$50,000 as a potential cut off because today the *de minimis* exemption applies when the contribution would be less than \$10,000. If a contributor (under the existing *de minimis* rule) has \$50,000 in annual assessable revenues, and we assume an average contribution factor for the year of 17 percent, that contributor would qualify for the *de minimis* exemption. We believe that adopting a \$50,000 revenues threshold would not change the number of contributors that would qualify for the *de minimis* exemption, but would simplify the application of the *de minimis* rule. Modifying the *de minimis* exemption in this manner could be more equitable, could have a smaller marginal impact, and may better align our requirements for reporting and contributing without affecting those whose "telecommunications activities are limited to such an extent that the level of such carrier's contribution to the preservation and advancement of universal service would be *de minimis*."<sup>360</sup> We seek comment on this analysis.

216. We also seek comment on whether such a rule would also reduce the reporting obligations and regulatory uncertainty for *de minimis* telecommunications providers with growing revenues. If so, we ask commenters to quantify the savings. Should we make it optional for contributors to file quarterly Telecommunications Reporting Worksheets for a year after which a contributor qualified as *de minimis*? To illustrate, consider a telecommunications provider that had \$9,000 in assessable revenues in 2011. Currently, the provider would need to have projected its assessable revenues for 2012 (and thus forecast whether or not it would still qualify for the *de minimis* exemption) by November 1, 2011, when the Telecommunications Reporting Worksheet projecting revenues for the first quarter of 2012 was due. Further, the telecommunications provider could face late filing fees and other sanctions if it did not file the quarterly Telecommunications Reporting Worksheet, but later determines that it should have (because it no longer qualifies for the *de minimis* exemption). We seek comment on whether we should adopt a rule that allows telecommunications providers in that position to avoid filing quarterly Telecommunications Reporting Worksheet in the first year for which they are no longer a *de minimis* filer. Such a rule could strike a reasonable balance between providing certainty to small (and growing) businesses in the telecommunications marketplace and the need for all telecommunications providers with a substantial presence to contribute to universal service in an equitable manner. We note that such a rule would not alter the obligation of telecommunications providers to file the *annual* Telecommunications Reporting Worksheet.

217. We also seek comment on other reforms the Commission could make to all of its *de minimis* rules—in the context of funding universal service, Telecommunications Relay Services (Interstate TRS), North American Numbering Plan, Local Number Portability, and regulatory fees administration programs—to relieve *de minimis* companies of the burden of filing the annual Telecommunications Reporting Worksheet. The *de minimis* exemption is meant to relieve small

---

<sup>360</sup> 47 U.S.C. § 254(d).

businesses of the cost of complying with our contribution rules when that cost would outweigh the contributions we could expect from the provider.<sup>361</sup> Today, however, thousands of *de minimis* telecommunications providers must nevertheless complete the annual Telecommunications Reporting Worksheet. We seek comment on whether we should reform our rules for filing the annual Telecommunications Reporting Worksheet and set the *de minimis* threshold based on a metric that does not require completing the entire worksheet. For example, should we establish an abbreviated form for telecommunications providers with less than some cutoff value in gross revenues? What metric should the Commission use for determining *de minimis* status? We ask commenters to discuss whether and how alternative metrics would be consistent with the language of section 254(d).<sup>362</sup> What threshold should the Commission establish to permit filing of the abbreviated form? How could we ensure that any revisions to these *de minimis* rules will not undermine the stability of funding for various federal regulatory programs or allow telecommunications providers to evade contribution obligations? Commenters that oppose such suggested rules should provide specific alternative rules and explain how their proposals will support the goals of universal service. We also seek comment on what changes, if any, may be needed in our *de minimis* rules if we were to assess the international telecommunications revenues of all telecommunications providers.

218. We seek comment on what steps would need to be taken to implement any of the potential modifications detailed above or alternative proposals to improve the contribution reporting requirements for *de minimis* providers. We also seek comment on how much time, if any, parties would need to transition to any new rules.

#### **B. Assessing Contributions Based on Connections**

219. In this section, we seek comment on moving from a revenues-based contribution assessment system to a system based on connections. Nothing in the Act requires contributions to be based on revenues, and the Commission has explored a connections-based methodology in the past. We ask whether a connections-based approach would better meet our proposed goals of promoting efficiency, fairness, and sustainability in the Fund, as well as other goals identified by commenters.

220. Under a connections-based system, providers would be assessed based on the number of connections to a communications network provided to customers. Providers would contribute a set amount per connection, regardless of the revenues derived from that connection. Under various proposals, there would be one standard monthly assessment for certain kinds of connections, typically provided to individuals, and a higher standard monthly assessment for higher speed or capacity connections, typically provided to enterprise customers. There might be several tiers for assessment based on speed or capacity. The standard assessment and higher assessment levels for higher speed or capacity connections would be calculated by applying a formula based on the USF demand requirement and the number of connections, however that term is defined. This contribution factor would apply equally for all connections that fall into the same category, such that assessments would no longer be based on revenues.

221. In 2001, the Commission first sought comment on replacing the existing revenues-based methodology with one that assesses contributions on the basis of a flat fee “per unit” charge.<sup>363</sup> In early 2002, the Commission proposed an assessment mechanism based on the number or speed of connections

<sup>361</sup> See 2001 Contribution Methodology Notice, 16 FCC Rcd at 9906–07, para. 31.

<sup>362</sup> 47 U.S.C. § 254(d) (“The Commission may exempt a carrier or class of carriers from [the requirement to contribute] if the carrier’s telecommunications activities are limited to such an extent that the level of such carrier’s contribution to the preservation and advancement of universal service would be *de minimis*.”).

<sup>363</sup> 2001 Contribution Methodology Notice, 16 FCC Rcd at 9905-06, paras. 25-30.

a contributor provides to a public network.<sup>364</sup> The Commission subsequently sought comment on various iterations of a connections-based system,<sup>365</sup> including hybrid systems that would include a connections and revenues component.<sup>366</sup>

222. Proponents of connections-based methodologies have argued that a connections-based system may provide a more stable contribution base than a revenue-based system because the number of connections has historically been more stable than end-user interstate telecommunications revenues.<sup>367</sup> In addition, proponents have suggested that connections-based assessments may mitigate the need to differentiate between revenues from interstate and intrastate jurisdictions and from telecommunications and non-telecommunications services.<sup>368</sup> Others have raised concerns that a connections-based system would impose new costs on both industry and USAC in the form of new data collection and reporting requirements, necessitating changes to billing and reporting systems.<sup>369</sup> Some have argued that a connections-based system may be at least as complex to implement and administer as a revenue-based system,<sup>370</sup> with many operational details that would need to be resolved. Despite several rounds of comment, the industry as a whole has not reached consensus about whether connections-based assessments are the best way to reform the contribution system: some providers have strongly opposed a

---

<sup>364</sup> 2002 First Contribution Methodology Order and FNPRM, 17 FCC Rcd at 3766, para. 34. In the 2002 NPRM, the Commission used the term “capacity” to refer to the bandwidth, or speed, of a connection. *Id.* Here, we use the term “speed” instead of “capacity” for such purposes. We use the term capacity here in the sense we used it in our recent *USF/ICC Transformation Order*, to refer to “the total volume of data sent and/or received by the end user over a period of time.” See *USF/ICC Transformation Order and FNPRM*, 26 FCC Rcd at 17689, para. 97.

<sup>365</sup> The Commission has inquired about various assessment methodologies including: (1) assessing residential, single-line business, and mobile connections \$1 and multi-line business customers a residual amount calculated to meet with the remaining needs of the USF, 2002 First Contribution Methodology Order and FNPRM, 17 FCC Rcd at 3766, para. 35; (2) assessing a mandatory minimum annual contribution of \$10,000 per provider, offset by an assessment for each end-user connection based on the nature or capacity of the connection, 2002 Second Contribution Methodology Order and FNPRM, 17 FCC Rcd at 24986, 24989, paras. 72, 78; and (3) assessing all connections based solely on capacity, without regard for whether the connections are residential or business and sharing the contribution obligation for switched end-user connections between switched and access providers, *Id.*

<sup>366</sup> In the 2002 Second Contribution Methodology Order and FNPRM, the Commission sought comment on a hybrid connections and revenues proposal and a hybrid numbers and connections proposal. 2002 Second Contribution Methodology Order and FNPRM, 17 FCC Rcd at 24991–97, paras. 86–100. In 2008, the Commission sought comment on assessing business connections as part of a hybrid numbers and connections methodology. See 2008 Comprehensive Reform FNPRM, 24 FCC Rcd at 6686, App. B, para. 81. See also Comment Sought on the Role of the Universal Service Fund and Intercarrier Compensation in the National Broadband Plan, NBP Notice #19, GN Docket Nos. 09-47, 09, *et al.*, Public Notice, 24 FCC Rcd 13757-58 (Wireline Comp. Bur. 2009) (seeking comment on numbers or connections-based methodology, an expanded revenues-based methodology, or some combination thereof).

<sup>367</sup> 2002 Second Contribution Methodology Order and FNPRM, 17 FCC Rcd at 24985, para. 70. See Letter from Ad Hoc Telecommunications Users Committee, Google, Inc. *et al.*, to Julius Genachowski, Chairman, FCC *et al.*, WC Docket No. 10-90 *et al.* (filed Aug. 8, 2011); Comments of SouthernLINC Wireless, GN Docket No. 09-47 *et al.*, at 7-8 (filed Dec. 7, 2009); Comments of the USA Coalition, GN Docket No. 09-47 *et al.*, at 9 (filed Dec. 7, 2009).

<sup>368</sup> 2002 Second Contribution Methodology Order and FNPRM, 17 FCC Rcd at 24985, para. 70; see, e.g., Comments of the United States Telecommunications Association, WC Docket No. 05-337 *et al.*, at 12 (filed Nov. 26, 2008) (USTA Nov. 26, 2008 Comments).

<sup>369</sup> See, e.g., XO Sept. 17, 2010 *Ex Parte* Letter at 4.

<sup>370</sup> See, e.g., *id.* at 3; Letter from L. Charles Keller, Counsel for Inmarsat, *et al.* to Marlene H. Dortch, Secretary, FCC (filed Aug. 13, 2010) (Inmarsat Aug. 13, 2010 *Ex Parte* Letter).

connections system,<sup>371</sup> others have been agnostic about whether a connections-based system is the optimal reform,<sup>372</sup> and still others who once supported a move to a system that includes a connections-based component appear to be re-evaluating their position on this issue.<sup>373</sup> In light of the varied connections-based proposals, the evolution of the communications ecosystem, and the comments received over the past decade, we now seek to refresh the record on the operation of a connections-based system, as well as the costs and benefits of such a system, as discussed below. We ask parties claiming significant costs or benefits of a connections-based system to provide supporting analysis and facts for such assertions, including an explanation of how data were calculated and all underlying assumptions.

## 1. Legal Authority

223. Section 254(d) of the Act requires that “[e]very telecommunications carrier that provides interstate telecommunications services shall contribute, on an equitable and nondiscriminatory basis, to the specific, predictable, and sufficient mechanisms established by the Commission to preserve and advance universal service.”<sup>374</sup> It also gives the Commission broad permissive authority to require contributions from a variety of providers. We seek to refresh the record on whether a connections-based assessment would satisfy the requirements of section 254(d). In responding to the specific questions below, we invite commenters to address how a connections-based system should be structured to fulfill the statutory requirement that telecommunications service providers contribute on an equitable and nondiscriminatory basis. If we were to adopt a connections-based contribution methodology, should we also explicitly exercise our permissive authority over specified providers to make clear that connections provided by those providers would be assessed? How would we ensure that all entities that contribute under a connections-based system are providers of interstate telecommunications?

224. In 2002, the Commission proposed a hybrid revenues/connections-based system that would require a mandatory minimum contribution based on interstate telecommunications revenues for all providers of interstate telecommunications. Under this proposal, all non-*de minimis* telecommunications carriers would contribute a mandatory minimum, either based on a percentage of total interstate revenue, or based on increasing percentages of telecommunications revenues or increasing flat-fee amounts tied to their telecommunications revenues.<sup>375</sup> Providers with end-user customers would also be assessed on a flat fee basis for residential, single line business, and mobile connections, and on a tiered basis based on speed or capacity for multi-line businesses. Providers with end-user assessments could offset their connections-based assessment against their minimum contribution.<sup>376</sup> In crafting this proposal, the Commission was specifically addressing concerns that a connections-based proposal would be inconsistent with section 254(d)’s requirement that every provider of interstate telecommunications service contribute.<sup>377</sup> We seek to refresh the record on this proposal and seek comment on whether, in fact, a mandatory contribution

<sup>371</sup> See, e.g., XO Sept. 17, 2010 *Ex Parte* Letter at 3; *Omaha Plan* at 22 (arguing that proposals to collect USF costs through connections are outdated, noting that connections fail to measure demand placed on the network by modern day electronic multi-media communications).

<sup>372</sup> See, e.g., Letter from Jeffrey S Lanning, CenturyLink, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 06-22 (filed Sept. 10, 2010) (supporting numbers and/or connections or revenues).

<sup>373</sup> Compare, e.g., Comments of AT&T Inc., GN Docket No. 09-51 *et al.*, at 3-5 (filed Dec. 7, 2009) with Letter from Henry Hultquist, AT&T, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 09-51, *et al.*, (filed Oct. 13, 2010) (setting out principles for contribution reform but not advocating a particular methodology).

<sup>374</sup> See 47 U.S.C. § 254(d).

<sup>375</sup> 2002 *Second Contribution Methodology Order and FNPRM*, 17 FCC Rcd at 24989-90, paras. 78, 80.

<sup>376</sup> *Id.* at 24989, para. 78.

<sup>377</sup> *Id.* at 24985, para. 71.

from every interstate telecommunications carrier is required to satisfy the requirements of section 254(d) that contributions be equitable and nondiscriminatory.

225. We also seek specific comment on whether a connections-based methodology is consistent with the Fifth Circuit's *TOPUC* decision, which held that section 2(b) of the Act prohibits the Commission from assessing revenues associated with intrastate telecommunications service.<sup>378</sup> The Fifth Circuit also interpreted the Act as limiting the Commission's authority to assess international revenues, finding that the Commission's contribution system may not inequitably and discriminatorily assess providers more in universal service contributions than the provider generates in interstate revenues.<sup>379</sup> We seek comment on the Commission's authority under a connections-based system to assess international connections that either originate or terminate in the United States and whether *TOPUC* would apply under such a system. We also seek comment on whether, if we were to adopt a connections-based system, we should adopt an exemption similar to the LIRE under the current revenues-based system for connections that are primarily international in nature,<sup>380</sup> and if so, how to craft such an exemption.

## 2. Defining "Connections"

226. *Background.* Unlike revenues, "connections" is not a universally-recognized or tracked unit, and the Commission would need to create a definition of "connection" for purposes of moving to a new connections-based contribution methodology. The definition of an assessable "connection" is therefore integral to any connections-based proposal.<sup>381</sup> And whereas total revenues are tracked and reported for non-USF purposes, such as for IRS or Securities Exchange Commission (SEC) requirements, connections generally are not tracked for other governmental purposes.<sup>382</sup>

227. Over the years, the Commission and the industry have grappled with the appropriate definition of connection for a connections-based methodology.<sup>383</sup> In general, a "connection" can be viewed as a physical *facility* (wired or wireless) that connects Point A to Point B, or a *service* provided over some physical facility.

228. The Commission has sought comment for purposes of universal service contributions on the definition of "connection" several times over the last decade in a series of Notices. As such, the

<sup>378</sup> *TOPUC*, 183 F.3d at 446-48. *But see* State Members of Joint Board CAF Comments at 121-24 (both the Commission and states should be able to assess interstate and intrastate telecommunications revenues; *TOPUC* was wrongly decided).

<sup>379</sup> *TOPUC*, 183 F.3d at 434-35.

<sup>380</sup> Under the LIRE, a contributor need not contribute on its projected collected international end-user telecommunications revenues if that contributor's projected collected interstate end-user telecommunications revenues comprise less than 12 percent of its combined projected collected interstate and international end-user telecommunications revenue. 47 C.F.R. § 54.706(c).

<sup>381</sup> *See, e.g.*, Inmarsat Aug. 13, 2010 *Ex Parte* Letter; Letter from Andrew M. Brown, Counsel for Ad Hoc Telecommunications Users Committee, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 06-122, et al., at 3 (filed Apr. 13, 2012) (Ad Hoc Telecom Users Apr. 13, 2012 *Ex Parte* Letter) (details of implementation will determine whether connections-based system is fair).

<sup>382</sup> As discussed in further detail below, the Commission collects information about broadband connections to end user locations, wired and wireless local telephone services, and interconnected VoIP service in individual states through FCC Form 477 filings. *See infra* para. 229.

<sup>383</sup> *See, e.g.*, Comments of the Coalition for Rational Universal Service and Intercarrier Reform, WC Docket No. 03-109, et al., at 18 (filed Nov. 26, 2008) (arguing that proposed numbers-and-connections fees are based on historical time-division multiplexing network technical constructs, and become clouded when applied to new packet-based voice services).

Commission has several potential definitions of the term “connection” on which to draw. In early 2002, the Commission sought comment on a facilities-based definition that would define a connection as “a facility that provides an end user with independent access to a public network regardless of whether that connection is circuit-switched, packet-switched, or a leased line (e.g., special access).”<sup>384</sup> Later in 2002, the Commission sought further comment on a modified definition which deleted the qualifier “independent” before “access” and included private as well as public networks. Under that definition, a connection is a facility that provides end users “with access to an interstate public or private network, regardless of whether the connection is circuit-switched, packet-switched, wireline or wireless, or leased line.” Subsequently, in 2008, the Commission proposed a service-based definition for business connections as part of a hybrid numbers-connection methodology, when it sought comment on defining a connection as “an interstate telecommunications *service* or an interstate *service* with a telecommunications component that connects a business end-user’s physical location (e.g., premises) on a dedicated basis to the contributor’s network or the PSTN.”<sup>385</sup>

229. In addition to the definitions proposed in the various Notices in the contributions rulemaking proceeding, the Commission also currently collects data from certain communications providers about “connections” as defined in the FCC Form 477. FCC Form 477 requires four types of providers to report on their connections: (1) “facilities-based providers of broadband connections to end user locations,” whether wireline or wireless;<sup>386</sup> (2) providers of “wired or fixed wireless local exchange telephone service”;<sup>387</sup> (3) providers of interconnected VoIP service;<sup>388</sup> and (4) providers of “mobile

<sup>384</sup> The Commission did not define the term “independent access,” but asked whether a connection should be considered “independent” if it does not require the presence of any other activated end-user connection to provide access to the network. The Commission then invited comment on whether, for example, two activated voice-grade connections via a single loop might be deemed “independent” because each allows stand-alone access to a public network. The Commission, likewise, sought comment on whether line-shared or line-split voice-band service and digital subscriber line (DSL) service provided over the same loop might both be deemed “independent,” and therefore separately assessed, because each allows stand-alone access to a public network. The Commission also pointed out that certain information services, such as voice mail or dial-up Internet access, may not be deemed “independent” because they would not allow access to a public network without an activated voice-grade connection. *2002 First Contribution Methodology Order and FNPRM*, 17 FCC Rcd at 3769-70, para. 42.

<sup>385</sup> See *2008 Comprehensive Reform FNPRM*, 24 FCC Rcd at 6686, App. B, para. 81 (emphasis added).

<sup>386</sup> For FCC Form 477 purposes, facilities-based providers of broadband connections must report wired lines or wireless channels that enable an end user to receive information from, or send information to, the Internet at transfer rates exceeding 200 kbps in at least one direction. 2012 Instructions for Local Telephone Competition and Broadband Reporting, Form 477 at 2 (*2012 FCC Form 477 Instructions*). For the purposes of FCC Form 477, a broadband “end user” is a residential, business, institutional, or government entity who uses broadband services for its own purposes and who does not resell such services to other entities or incorporate such services into retail Internet-access services. For purposes of Part I of FCC Form 477, an Internet Service Provider (ISP) is not an “end user” of a broadband connection. *Id.* For the purposes of FCC Form 477, an entity is a “facilities-based” provider of broadband connections to end user locations if any of the following conditions are met: (1) it owns the portion of the physical facility that terminates at the end user location; (2) it obtains unbundled network elements (UNEs), special access lines, or other leased facilities that terminate at the end user location and provisions/equips them as broadband, or (3) it provisions/equips a broadband wireless channel to the end user location over licensed or unlicensed spectrum. *Id.*

<sup>387</sup> Providers of wired or fixed wireless local exchange telephone service must report voice grade equivalent lines and voice grade equivalent wireless channels. *2012 FCC Form 477 Instructions* at 2.

<sup>388</sup> Interconnected VoIP service providers must report service that enables real-time, two-way voice communications; requires a broadband connection from the user’s location; requires Internet-protocol compatible customer premises equipment; and permits users generally to receive calls that originate on the public switched network and to terminate calls to the public switched network. *2012 FCC Form 477 Instructions* at 3.



telephony services.”<sup>389</sup> Form 477 thus effectively categorizes connections according to services, so that a given provider may report separately about voice and broadband services delivered over the same physical facility.

230. *Discussion.* We seek comment on the definition of an assessable connection that best meets our proposed goals of promoting efficiency, fairness, and the sustainability of the Fund, as well as other goals identified by commenters. As described below, the question of the appropriate definition of an assessable connection is related to, but may be distinct from, the questions raised in Section IV of this Notice regarding what providers and services should contribute to universal service.<sup>390</sup>

231. *Facilities-Based Definition.* A facilities-based definition focuses on the physical facility – either wired line or wireless channel – that is provided by the contributor. Under a facilities-based definition, the connection itself, and not the services that are provided over the connection, would be assessed. For example, a physical line to a residential home would be assessed as one “assessable connection” even if it provided multiple assessable services to the customer. A multi-line business connection would likewise be assessed based on speed or capacity of the facility and not the services provided over the facility. A facilities-based approach raises complexities, however, to the extent that the assessment varies based on the speed of the facility, in circumstances where the physical connection provides variable speed on demand.

232. If we were to adopt a facilities-based definition, would it be appropriate to build on the definition that was suggested in late 2002: a facility that provides end users with “access to an interstate public or private network, regardless of whether the connection is circuit-switched, packet-switched, wireline or wireless, or leased line”?<sup>391</sup> For example, we seek comment on the following potential definition of connection:

*Connection. A facility that provides end users with access to any assessable service, whether circuit-switched, packet-switched, wireline or wireless, leased line or provisioned wireless channel.*

Alternatively, we seek comment on the following potential definition of connection, building on the FCC Form 477:

*Connection. A wired line or wireless channel used to provide end users with access to any assessable service.*

233. Are there any significant differences in what would qualify as “connections” under these definitions?

234. We believe either definition could be used with either of the two general approaches to defining assessable services described in Section IV of this Notice. That is, either definition could be used either if, as described in Section IV.B, we were to continue defining assessable services as

<sup>389</sup> Facilities-based mobile telephony service providers must report real-time, two-way switched voice service that is interconnected with the public switched network using an in-network switching facility that enables the provider to reuse frequencies and accomplish seamless handoff of subscriber calls. *2012 FCC Form 477 Instructions* at 3. A mobile telephony service provider is considered “facilities-based” if it serves a subscriber using spectrum for which the entity holds a license that it manages, or for which it has obtained the right to use via lease or other arrangement with a Band Manager. *Id.*

<sup>390</sup> See *supra* Section IV.

<sup>391</sup> See, e.g., *2002 Second Contribution Methodology Order and FNPRM*, 17 FCC Rcd at 24987, para. 76.

telecommunications services plus certain enumerated other services, or if, as described in Section IV.C, we were to adopt a more general definition of assessable services. We seek comment on this analysis.

235. We also seek comment on the impact of adopting a facilities-based definition of connection. How would adopting such a definition affect the distribution of contribution obligations among different industry sectors, or the relative contribution burden borne by mass market versus enterprise customers? Would such a definition provide predictability for contributors, while retaining sufficient flexibility to accommodate the evolution of the telecommunications marketplace? Are there variations on the definitions, or alternate definitions, that would better meet our proposed goals for contribution reform?

236. *Service-Based Definition.* Under a service-based definition, the definition of the connection “unit” would focus on the service or services that are delivered over the facility. Under such a definition, each interstate telecommunications service using the connection would be assessed as one “unit,” as could any service that had an interstate telecommunications component. For example, in contrast to the facilities-based definition, if a customer purchases two services that we have determined are assessable and that are delivered over the same facility, the provider would be assessed for two connections.<sup>392</sup> Multi-line business services could likewise be assessed based on the services that are provided over the connection.

237. For example, we seek comment on the following potential service-based definition of connection:

*Connection. An assessable service provided to an end user.*

238. As above, we seek comment on the impact of adopting this definition of connection. How many total connections would there be under this definition, given the different approaches to defining assessable services in Section IV of this Notice? Would this definition raise questions regarding whether particular offerings were one “service” or multiple bundled services? For example, under such a definition, should a subscriber purchasing both text messaging service and voice service be counted as two connections or one? How would family plans or other multi-user or multi-device scenarios be treated?

239. How would adopting this definition affect the distribution of contribution obligations among different industry sectors, or the relative contribution burden borne by mass market versus enterprise customers? Would this definition provide predictability for contributors, while retaining sufficient flexibility to accommodate the evolution of the telecommunications marketplace? Are there variations on this definition, or alternate definitions, which would better meet our proposed goals for contribution reform?

240. We also seek comment on alternative service-based definition that would focus on *usage* (i.e., how much throughput actually traverses the connection in a given period).

241. *Defining “End User.”* We also seek comment on whether a definition of connection should be limited to connections provided to “end users.” In prior years, the Commission sought comment on whether to apply the same definition of end user that is used under the current revenue-based system.<sup>393</sup> As discussed above, under the existing system, “end users” include purchasers of retail interstate telecommunications or telecommunications services that do not contribute on their finished

---

<sup>392</sup> The question of which services are assessable would be addressed separately, as discussed in Part IV.

<sup>393</sup> 2002 First Contribution Methodology Order and FNPRM, 17 FCC Rcd at 3769, para. 41.

offerings.<sup>394</sup> End users do not include entities that purchase wholesale inputs and contribute on the services they provide to other customers.<sup>395</sup> Would including the use of the term “end user” in the definition of a connection perpetuate some of the challenges we see under the current revenue-based system discussed above, such as, for example, the difficulty of determining whether a customer is an end user or reseller of specific services for purposes of USF contribution obligations?<sup>396</sup> How should we define end user if we adopt a connections-based approach? Should we, for instance, define an end user as a residential, business, institutional, or governmental entity who uses the services provided for its own purposes, and does not sell the service to other entities, or incorporate the service into another service sold to other entities?

242. Would a system that requires each provider to “pay its own way” – that is, each provider would contribute based on the connection it provides to another entity – be simpler from a compliance and administrative perspective? In 2002, the Commission sought comment on a proposal that would split connections-based contribution obligations between switched access and interstate transport providers.<sup>397</sup> Under such an approach, a provider of both local and interexchange services to the end user would be assessed two units per connection (one for access and one for transport), while a provider that provided only local service would be assessed one unit and the interexchange carrier would be assessed one unit.<sup>398</sup> We invite comment on whether a more general system of this type that requires each provider of connections to contribute would be simpler from a compliance and administration perspective than a system that requires only the provider with the relationship to the end user customer to contribute. For instance, as discussed above, if we were to adopt a service definition of connection, and Carrier A sells a private line to Carrier B, and Carrier B in turn uses that circuit to provide both an enterprise communications service and VoIP to its retail customer, should Carrier A be assessed one unit for that high-speed line, while Carrier B is assessed one unit for the communications service and a second unit for the VoIP service?

243. *Connections Provided to Lifeline Subscribers.* Today there are approximately 14.8 million Lifeline subscribers.<sup>399</sup> We seek comment on whether the Commission has statutory authority to exclude from assessment connections provided to Lifeline subscribers. Would it be consistent with section 10 to forbear from imposing contribution obligations on such connections?

244. How would the exclusion of such connections impact a connections-based regime? What would be the policy justifications for excluding these connections from contribution obligations? Alternatively, should such connections associated with Lifeline services be assessed at a pro-rated or reduced rate, and if so, what would be an appropriate amount?

### 3. Trends in Connections

245. We seek comment regarding trends in connections over time. We seek data to project the number of connections that exist today under the facilities-based definitions discussed above. If we were to adopt a service-based definition, the number of connections would largely depend on how narrowly or broadly we were to define the relevant assessable services. We invite commenters to present data and

---

<sup>394</sup> See *Universal Service First Report and Order*, 12 FCC Rcd at 9207, para. 844.

<sup>395</sup> See *id.* at 9207, 9208, paras. 844, 848.

<sup>396</sup> See *supra* Section V.A.4.

<sup>397</sup> *2002 Second Contribution Methodology Order and FNPRM*, 17 FCC Rcd at 24991, para. 86.

<sup>398</sup> *Id.*

<sup>399</sup> USAC Second Quarter 2012 Filings, LI08 - Lifeline Subscribers by State or Jurisdiction.xls available at <http://www.usac.org/about/tools/fcc/filings/2012/q2.aspx>.

their underlying assumptions regarding the number of connections under the alternative connection definitions discussed above.

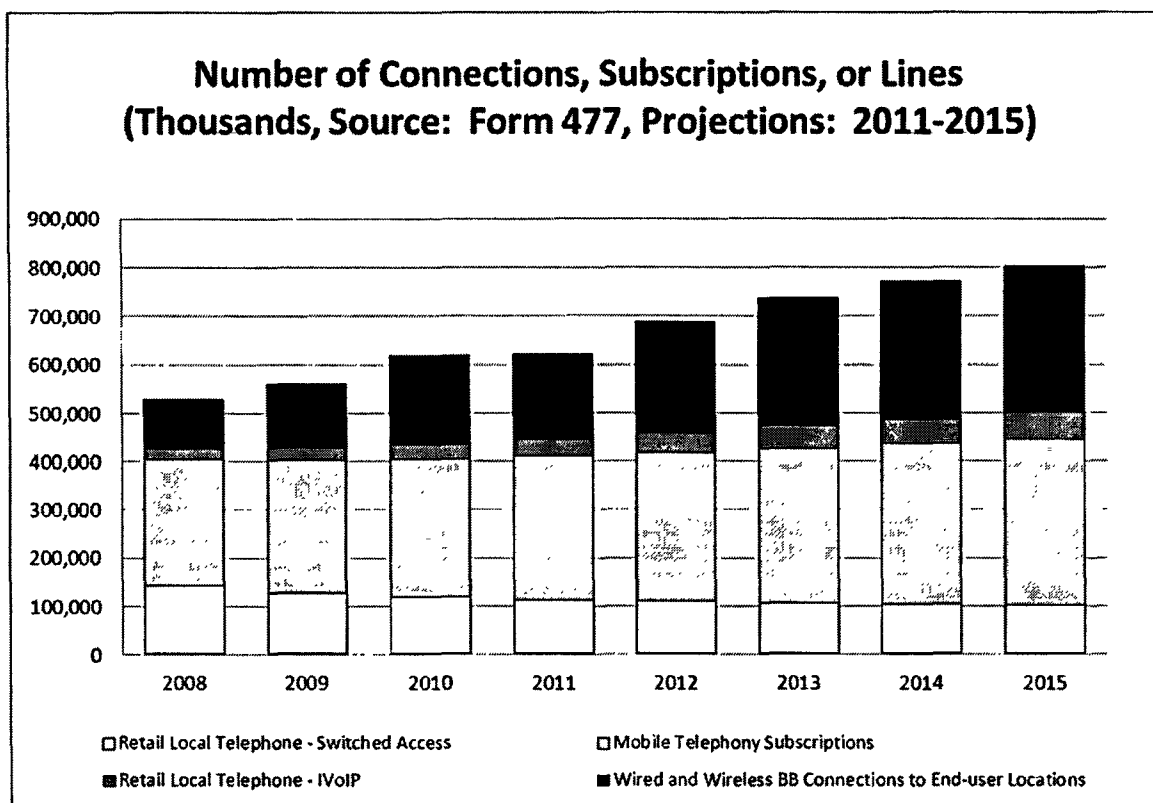
246. The FCC Form 477 data collection provides some information that may be useful in projecting the number of connections. As discussed above, FCC Form 477 counts broadband connections separately from connections that are used for local telephone service, which provides some basis for estimating the number of connections if we were to exercise our permissive authority over broadband Internet access services and also adopted a definition of connections that counted broadband separately from voice. Notably, because the form is designed mainly to track residential connections, it does not capture many connections provided to businesses, governmental entities, and other large institutions.

247. As shown in Chart 6 below,<sup>400</sup> there were 616 million connections reported under the FCC Form 477 connection categories in 2010: 117 million local landlines (switched access lines), 32 million interconnected VoIP subscriptions, 285 million mobile telephone subscriptions, and 182 million broadband connections. If one assumes continued growth in mobile subscriptions, interconnected VoIP and broadband connections, the total number of connections could grow to approximately 800 million connections under the FCC Form 477 connection categories by 2015.

248. We seek comment on our analysis of the 477 data and invite commenters to present their own analysis and underlying assumptions. In particular, how many enterprise connections are there under different definitions of connections and of assessable enterprise services? And if we were to adopt a facilities-based definition of connections, rather than the service-based approach used in Form 477, how many connections are there, and what is the likely trend in the number of connections over time? To what extent are the landlines or mobile subscriptions reported in FCC Form 477 also providing broadband?

---

<sup>400</sup> The FCC Form 477 data contain counts of connections, subscriptions, and lines for a diverse set of voice and data services. Counts may be sensitive to assumptions on how specific services are defined. Projections are based on staff estimates.

**Chart 6**

#### 4. Assessment and Use of Speed or Capacity Tiers

249. Another key question is whether a connections-based assessment should be based on speed or capacity tiers and how to define any such tiers. In the past, the Commission's proposals have assumed a connections-based methodology would classify connections into various tiers, and each connection within a tier would be assessed the same flat fee.<sup>401</sup> We seek comment on how assessment based on speed or capacity tiers would operate under a service or facilities-based definition of "connection," and whether such an assessment structure would further our proposed reform goals of promoting efficiency, fairness, and sustainability of the Fund.

250. *Determining the Per-Unit Assessment.* In the past, the Commission has sought comment on grouping residential, single-line business, and mobile wireless connections together in a separate

<sup>401</sup> See, e.g., 2002 First Contribution Methodology Order and FNPRM, 17 FCC Rcd at 3774, para. 52 (proposing three tiers of up to 1.544 Mbps, 1.544 to 45 Mbps, and 45 Mbps or higher for multi-line business connections); 2002 Second Contribution Methodology Order and FNPRM, 17 FCC Rcd at 24989-90, para. 81 (proposing four tiers of up to 725 kbps, 726 kbps to 5 Mbps, 5.01 Mbps to 90 Mbps, and greater than 90 Mbps for multi-line business connections); 2008 Comprehensive Reform FNPRM, 24 FCC Rcd at 6686, App. B, para. 81 (proposing two tiers of up to 64 kbps and over 64 kbps for business services). See also, e.g., Letter from Mary L. Henze, AT&T Services, Inc., to Marlene H. Dortch, Secretary, FCC, WC Docket No. 06-122, CC Docket No. 96-45, at 1-2 (filed Oct. 29, 2008) (AT&T Oct. 29, 2008 *Ex Parte* Letter) (proposing three tiers of up to 25 Mbps, over 25 Mbps up to and including 100 Mbps, and over 100 Mbps for dedicated business connections). In addition, some parties have questioned whether it is appropriate to base the tiers on capacity rather than usage. See, e.g., XO Sept. 17, 2010 *Ex Parte* Letter at 3.

category from multi-line business connections, and assessing each based on a flat fee.<sup>402</sup> Under such a system, the initial proposed amount for the residential, single-line business, and mobile wireless connections has been in the range of \$1 per month.<sup>403</sup> The residual USF demand would then be met through assessments on multi-line business connections based on the number and capacity of the connections.<sup>404</sup> We seek comment to refresh the record on such an approach. How would the contribution amount for a typical consumer vary under such an approach compared to the revenues-based approach in place today?

251. In the past, in response to proposals based on a per-unit assessment, various segments of the industry have requested that they be treated differently for USF contribution purposes. For example, paging providers have sought a reduced assessment because of the limited functionality of the service and because the proposed per-unit assessment exceeds by a large multiple the amount of assessment paid under the current revenue-based system.<sup>405</sup> Likewise, providers offering free services, telematics, wireless prepaid plans, and family wireless plans have, in the past, all requested that such connections be treated differently because a flat \$1 per month assessment would increase their USF obligation dramatically.<sup>406</sup> If we were to adopt a connections-based approach, should certain providers be eligible for special consideration or exemption? We seek comment on whether a connections-based system that provides special treatment for a myriad of services would meet our proposed goals of ensuring sustainability of the Fund, while simplifying compliance and administration.

252. As noted above,<sup>407</sup> a recent development is the growth in machine-to-machine connections,<sup>408</sup> enabling such innovations as smart meter/smart grids, remote health monitoring, or supply

---

<sup>402</sup> 2002 First Contribution Methodology Order and FNPRM, 17 FCC Rcd at 3766-67, para. 35. See 2008 Comprehensive Reform FNPRM, 24 FCC Rcd at 6678, App. B, para. 59; AT&T Oct. 29, 2008 *Ex Parte* Letter at 1.

<sup>403</sup> 2002 First Contribution Methodology Order and FNPRM, 17 FCC Rcd at 3766-67, para. 35 (proposing a \$1.00 fee per residential, single-line business, and mobile connection). See 2008 Comprehensive Reform FNPRM, 24 FCC Rcd at 6678, App. B, para. 59 (proposing an \$0.85 fee per telephone number for each residential, single-line business, and mobile connection); AT&T Oct. 29, 2008 *Ex Parte* Letter at 1 (proposing an \$0.85 fee per telephone number for each residential, single-line business, and mobile connection).

<sup>404</sup> See, e.g., 2008 Comprehensive Reform FNPRM, 24 FCC Rcd at 6686, App. B, para. 81 (proposing monthly per-connection assessments of \$5 and \$35 for higher capacity connections); AT&T Oct. 29, 2008 *Ex Parte* Letter at 1-2 (proposing monthly per-connection assessments of \$2, \$15, and \$250 for higher capacity connections); 2002 Second Contribution Methodology Order and FNPRM, 17 FCC Rcd at 24989-90, para. 81 (seeking comment on four-tier structure, with Tier 1 having a "maximum capacity" of up to 724 Kbps, a Tier 2 between 725 Kbps and 5 Mbps, a Tier 3 between 5.01 Mbps and 90 Mbps, and a Tier 4 for connections with maximum capacity greater than 90 Mbps). As used in the earlier contribution methodology Notices, the term "capacity" referred to the maximum speed available for a given connection.

<sup>405</sup> 2002 First Contribution Methodology Order and FNPRM, 17 FCC Rcd at 3768, para. 39.

<sup>406</sup> See, e.g., Letter from Samuel L. Feder, Counsel for j2 Global Communications, Inc., to Marlene H. Dortch, Secretary, FCC, WC Docket No. 06-122, at 1 (filed Aug. 20, 2010) (arguing that free and low-volume services should be exempt from flat-rate, per unit assessment); Letter from Matthew A. Brill, Counsel for Toyota Motor Sales, Inc., to Marlene H. Dortch, Secretary, FCC, WC Docket No. 06-122, at 1-2 (filed Aug. 12, 2010) (arguing against a connections system because of the dramatically higher costs on telematics providers); Letter from Scott Bergmann, CTIA, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 01-92 *et al.*, Attach. at 8 (filed Apr. 14, 2010) (arguing for assessment of prepaid wireless service on a per-minute-of-use basis and assessment of non-primary wireless family plan at 50% of the flat-rate, per unit charge).

<sup>407</sup> See *supra* Section IV.C.

<sup>408</sup> See generally OECD Digital Economy Papers, Machine-to-Machine Communications, Connecting Billions of Devices (Working Paper No. 192, 2012), available at <http://dx.doi.org/10.1787/5k9gsh2gp043-en> (last visited Apr. 16, 2012).

chain tracking. To the extent we were to exercise permissive authority over some or all machine-to-machine connections, should they be assessed at the same level, or flat rate, as other connections? If not, how should they be assessed?

253. Another question that would need to be resolved under a connections-based approach with tiers is whether and how to update the tiers and/or assessment amounts as business and residential users move to higher bandwidth services and new technologies and services develop.<sup>409</sup> In previous Notices, the Commission recognized that, to ensure an appropriate amount of funds for universal service, it would need to revisit and adjust the assessment amount periodically.<sup>410</sup> Recently, the Commission has taken significant strides to minimize future growth of the Fund by adopting a budget in the recent *USF Transformation Order* and a savings target in the *Lifeline and Link-Up Reform and Modernization Order*.<sup>411</sup> These measures to instill fiscal responsibility in these programs are in addition to the caps on other universal service support mechanisms (i.e., the schools and libraries and rural health care mechanisms).<sup>412</sup> We seek comment on how often we should revisit any per-unit amount, if we were to adopt a connections-based proposal, in light of these reforms. Would a semi-annual or annual review be sufficient to meet the needs of the Fund? We also seek comment on whether any re-evaluation of the assessment should happen on a set schedule or an ad hoc basis, either on our own motion or at the request of industry participants or USAC. What factors should we consider in determining whether to adjust the assessment? When periodically readjusting the unit amounts, should we aim to maintain the relative proportion of contribution burdens between residential and business consumers? How could that proportion be accurately determined?

254. *Tiers.* In 2002, the Commission proposed that contributions from providers of multi-line business connections be a residual amount calculated to meet the remaining universal service funding needs not met by contributions for residential, single-line business, and mobile connections. The Commission reasoned that this proposal would make contribution obligations more predictable and understandable for residential, single-line business, and mobile customers, and that multi-line businesses may be better equipped to understand the fluctuations in assessments from quarter to quarter.<sup>413</sup> We seek comment on whether this reasoning remains valid in today's marketplace.

255. In the past, the Commission sought comment on defining a connection as either a residential/single-line business or a multi-line business connection based on whether the residential/single-line business or multi-line business subscriber line charge (SLC) is assigned to the connection.<sup>414</sup> We seek to update the record on whether this delineation is an effective way to identify

---

<sup>409</sup> See Internet Society, *Growing Pains: Bandwidth on the Internet* 6 (Mar. 2010) (Briefing Paper), available at <http://www.isoc.org/isoc/conferences/bwpanel/docs/bp-growingp-201003-en.pdf> (last visited Apr. 9, 2012) (discussing studies showing that the annual growth rate for global Internet bandwidth lies somewhere between 40 percent and 50 percent).

<sup>410</sup> See, e.g., *2001 Contribution Methodology Notice*, 16 FCC Rcd at 9908, paras. 33-35; *2002 First Contribution Methodology Order and FNPRM*, 17 FCC Rcd at 3787, para. 78; *2002 Second Contribution Methodology Order and FNPRM*, 17 FCC Rcd at 24988, para. 77.

<sup>411</sup> See *USF/ICC Transformation Order and FNPRM*, 26 FCC Rcd at 17672, para. 18; *Lifeline and Link Up Reform and Modernization Order*, FCC 12-11, para. 358.

<sup>412</sup> See *USF/ICC Transformation Order and FNPRM*, 26 FCC Rcd at 17672, para. 18; *Lifeline and Link Up Reform and Modernization Order*, FCC 12-11, para. 358.

<sup>413</sup> *2002 First Contribution Methodology Order and FNPRM*, 17 FCC Rcd at 3773, para. 51. But see, *Ad Hoc Telecom Users* Apr. 13, 2012 *Ex Parte* Letter at 3 (no residual funding requirements should be imposed on business users or services).

<sup>414</sup> *2002 First Contribution Methodology Order and FNPRM*, 17 FCC Rcd at 3766-67, para. 35.

residential and single-line business connections in today's market, particularly given the growth in wireless and VoIP connections—which typically do not charge SLCs or their equivalent.<sup>415</sup> Not only is such a method for distinguishing residential connections from business connections possibly outdated today, but we are concerned it will become increasingly more so as users move to alternative providers that do not charge SLCs.<sup>416</sup> We seek comment on whether, if we adopt a connections-based approach, we should distinguish between residential/mass market connections and business/enterprise connections. And, if so, we seek comment on other objective measures aside from the SLC that we could use to distinguish between these two categories of connections.

256. We understand anecdotally that many companies are moving away from purchasing mobile service directly for employees in favor of providing employees with reimbursements for their personal mobile monthly plans.<sup>417</sup> To the extent we were to make a distinction between residential and business connections, how should such connections be classified as residential or multi-line business connections? How would contributors distinguish such connections absent a corporate identifier on the account? We seek comment on these issues and whether such a distinction serves our proposed policy goals of administrative efficiency, fairness, and sustainability.

257. *Tier Structures.* Over the years, the Commission and the industry have proposed various tiers to calculate assessments for multi-line business connections, with no one approach emerging as the preferred alternative. In 2002, the Commission proposed a structure of three tiers of up to 1.544 Mbps, 1.544 to 45 Mbps, and 45 Mbps or higher for multi-line business connections.<sup>418</sup> Later in 2002, the Commission updated the proposed tiers to four tiers of up to 725 kbps, 726 kbps to 5 Mbps, 5.01 Mbps to 90 Mbps, and greater than 90 Mbps for multi-line business connections.<sup>419</sup> At that time, the Commission sought to set the speed ranges so that then-common service offerings would fall well within each tier in order to minimize market distortion.<sup>420</sup> Subsequently in 2008, the Commission proposed just two tiers of up to 64 kbps and over 64 kbps for business services.<sup>421</sup> Commenters have also proposed different set of tiers. AT&T, for example, proposed three tiers of up to 25 Mbps, over 25 Mbps up to and including 100 Mbps, and over 100 Mbps for dedicated business connections.<sup>422</sup>

---

<sup>415</sup> See *Lifeline and Link Up Reform and Modernization Order*, FCC 12-11, paras. 55-56 (noting that many Lifeline subscribers take service from competitive ETCs, who do not assess SLCs on their subscribers and whose cost structure is unrelated to the SLC). See also *Universal Service First Report and Order*, 12 FCC Rcd at 8970-71, paras. 366-67.

<sup>416</sup> Moreover, we note that the recent *USF/ICC Transformation Order* sought comment on the continuing relevance of SLCs even for incumbent LECs and sought comment on reexamining and possibly phasing out SLCs. See *USF/ICC Transformation Order*, 26 FCC Rcd at 18121-23, paras. 1330-33. See also *Ad Hoc Telecom Users Apr. 13, 2012 Ex Parte Letter* at 3 (there is no basis for distinguishing between residential and business connections).

<sup>417</sup> See *Global Survey: Dispelling Six Myths of Consumerization of IT*, Avanade (Jan. 2012), available at <http://www.avanade.com/Documents/Resources/consumerization-of-it-executive-summary.pdf>; see also Roger Cheng, *So You Want to Use Your iPhone for Work? Uh-oh.*, Wall St. J. (Apr. 24, 2011), available at <http://online.wsj.com/article/SB10001424052748704641604576255223445021138.html>.

<sup>418</sup> *2002 First Contribution Methodology Order and FNPRM*, 17 FCC Rcd at 3774, para. 52.

<sup>419</sup> *2002 Second Contribution Methodology Order and FNPRM*, 17 FCC Rcd at 24989-90, para. 81.

<sup>420</sup> *Id.* at 24990-91, para. 83.

<sup>421</sup> *2008 Comprehensive Reform FNPRM*, 24 FCC Rcd at 6686, App. B, para. 81.

<sup>422</sup> See, e.g., AT&T Oct. 29, 2008 *Ex Parte Letter* at 1-3.



258. In today's ever evolving marketplace, there is increased demand for multi-line business connections to have more bandwidth.<sup>423</sup> One of the proposed goals of our reformed contribution system is to simplify administration and reporting. Is there a way to structure the speed tiers in a future-proof manner? Or, would a system based on available speed tiers inevitably become outdated as the communications industry continues to evolve? Is there a reasonable way to have tiers automatically adjusted, for example by setting tiers based on percentile, such that the slowest quartile of connections would fall into one tier, the next quartile in another tier, etc.?

259. We seek comment on whether any of the previously proposed tier structures would be appropriate in today's marketplace, and whether any such tiers should be limited to business customers or whether they should extend to residential or mass market connections as well. We seek to refresh the record in light of recent actions taken in the *USF-ICC Transformation Order and FNPRM* and other pending proceedings.<sup>424</sup> For instance, in establishing tiers, to what extent, if at all, should we take into account the Commission's decision to establish 4 Mbps down/1 Mbps up as the minimum speed for fixed broadband connections under the Connect America Fund? Should speed tiers for universal service contribution purposes be based on actual speeds or advertised speeds? Is one approach preferable to another for purposes of auditing and enforcing compliance with our contributions rules?

260. To the extent commenters believe one of the previously proposed tier structures is appropriate for today's market, we seek detailed comments to support such a position. Additionally, we encourage commenters to propose a tier structure that accounts for the qualities of connections in the marketplace today. In the past, the Commission sought comment on a tier structure based on speed. Should tiers also be set based upon capacity, or the total volume of data that can be sent and/or received over the connection by the end user over a period of time? Commenters should explain why they propose tiers at the particular capacity range and propose the appropriate assessment amount for each tier. Commenters should also discuss how we can structure the tiers so that they will accommodate future evolution. We seek to minimize the potential for market distortion based on the tier structure; commenters should address how their proposal addresses this concern in their responses.<sup>425</sup> Commenters proposing new tier structures should also provide an analysis of the impact on the Fund and the relevant burdens to residential and business consumers.

261. Would the current FCC Form 477 tier structure work in the context of a USF connections-based assessment? For example, FCC Form 477 tracks facility-based broadband connections in ten different technology categories (e.g., asymmetrical and symmetrical xDSL, cable modem, fiber-to-the-home, mobile wireless) based on transfer rates ranging from 200 kbps to greater than 100 mbps.<sup>426</sup> We seek comment on whether this categorization and tier structure as well as the other data collection requirements in the FCC Form 477 could work for universal service contribution purposes, or whether they could be easily modified to satisfy the requirements of both the FCC Form 477 and any established USF contribution rules and requirements. If we were to modify our FCC Form 477 data collection, should we also make corresponding modifications to the tiers for purposes of USF contributions?

---

<sup>423</sup> See, e.g., Cisco Visual Networking Index: Forecast and Methodology, 2010–2015, at Table 17 (Jun. 1, 2011) available at [http://www.cisco.com/en/US/solutions/collateral/ns341/ns525/ns537/ns705/ns827/white\\_paper\\_c11-481360.pdf](http://www.cisco.com/en/US/solutions/collateral/ns341/ns525/ns537/ns705/ns827/white_paper_c11-481360.pdf).

<sup>424</sup> See, e.g., *Modernizing the FCC Form 477 Data Program*, et. al., WC Docket No. 07-38, Notice of Proposed Rulemaking, 26 FCC Rcd 1508 (2001) (seeking comment on whether and how to reform the FCC Form 477 data program).

<sup>425</sup> See, e.g., *2002 Second Contribution Methodology Order and FNPRM*, 17 FCC Rcd at 24990, para. 80.

<sup>426</sup> *2012 FCC Form 477 Instructions* at 8-9; *2012 Local Telephone Competition and Broadband Reporting Form 477, Part I*.

262. While multi-line business connections may provide a specific maximum level of speed or capacity, other connections provide customers, through contractual agreements, with the option of utilizing additional speed or capacity on a short-term basis.<sup>427</sup> One of the challenges of a tiered connections-based approach is how it would address connections that provide varying speed at different points in time. For example, should we consider how “burstable” bandwidth would be assessed under a connections-based system? Burstable bandwidth allows a connection to exceed its stated speed, usually up to a pre-chosen maximum capacity for a period of time, such as during periods of heavy network activity or peak network usage.<sup>428</sup> We seek comment on what rules should be adopted to address such situations, if we were to adopt a connections-based system.

263. Some commenters argue that there is little correlation between connection speed and telecommunications usage.<sup>429</sup> These commenters ask whether it is more appropriate to base the tiers on usage rather than speed.<sup>430</sup> Under prior connections-based proposals, contributors would be assessed for multi-line business connections based on the maximum amount of bandwidth they allocate to the connection, not the actual amount of bandwidth used.<sup>431</sup> Because customers often purchase excess bandwidth for backup or future growth, some commenters argue that assessing a connection at the maximum available speed taxes spare bandwidth and could lead to poor network management practices.<sup>432</sup> We seek comment on this position. We also seek comment on how a provider would measure the actual usage of a customer’s connection and the burdens associated with such reporting. Finally, we seek comment on how we would audit actual usage.

## 5. Policy Arguments Related to Connections-Based Assessment

264. In 2002, the Commission outlined a number of potential benefits of a connections-based assessment methodology: the number of connections has been more stable than interstate revenues and therefore connections-based assessment may provide a more predictable and sufficient funding source for universal service; under a connections-based approach, providers would not have to allocate revenues between interstate and intrastate jurisdictions or between telecommunications and non-telecommunications services; and under a connections-based end-user approach, only one entity – the one with the direct relationship with the end user – would be responsible for contributing, thereby potentially reducing the complexities associated with collecting and reporting USF fees.<sup>433</sup> We seek comment to

<sup>427</sup> See, e.g., XO Sept. 17, 2010 *Ex Parte* Letter at 3. In 2002, the Commission used the example of Centrex services that offer the potential to utilize additional capacity in those instances where the demand for capacity exceeds the amount of capacity that the carrier has allocated for the customer. For example, if a private branch exchange switch has a 1.544 Mbps trunk, and all of that capacity is being used, the customer would be unable to make or receive phone calls. A customer that uses a Centrex switch, however, that has a 1.544 Mbps trunk in which all of the capacity is being used would be able to continue to make or receive phone calls because the carrier establishes the service with reserve capacity. 2002 *First Contribution Methodology Order and FNPRM*, 17 FCC Rcd at 3775, para. 55 & n.134.

<sup>428</sup> See, e.g., H. Newton, *Newton’s Telecom Dictionary* 217 (25th ed. 2009) (“burstable T1”).

<sup>429</sup> See, e.g., XO Sept. 17, 2010 *Ex Parte* Letter at 3.

<sup>430</sup> See, e.g., *id.*

<sup>431</sup> See 2002 *First Contribution Methodology Order and FNPRM*, 17 FCC Rcd at 3773, para. 50; 2002 *Second Contribution Methodology Order and FNPRM*, 17 FCC Rcd at 24987, para. 75.

<sup>432</sup> See, e.g., XO Sept. 17, 2010 *Ex Parte* Letter at 3.

<sup>433</sup> 2002 *First Contribution Methodology Order and FNPRM*, 17 FCC Rcd at 3784, para. 71. Although payphone aggregators may not have a direct relationship with the end user, the Commission requires that payphone aggregators contribute because they directly compete with mandatory contributors and the public interest so requires. *Universal Service First Report and Order*, 12 FCC Rcd at 9184-85, para. 797 (exercising its permissive authority).

refresh the record on these issues given the changes that have occurred in the telecommunications marketplace since 2002 and the potential rule changes discussed in this Notice. Is a connections-based contribution methodology consistent with the proposed goals of having a contribution methodology that is efficient, fair, and sustainable?

265. *Distinguishing Telecommunications from Non-Telecommunications.* In 2002, the Commission and commenters suggested as a potential benefit that a connections-based methodology might not require carriers to distinguish between telecommunications and non-telecommunications services, distinctions that may be increasingly difficult as the marketplace evolves.<sup>434</sup> We seek comment above on approaches to provide clarity to contributors with respect to specific services, without the need to classify those services as either information services or telecommunications services. We also seek comment on assessing revenues associated with information services.<sup>435</sup> In light of those potential approaches, is this potential advantage of a connections-based methodology still relevant? If we were to adopt a facilities-based connections approach, should we make an affirmative finding that each connection within the scope of our definition “provides interstate telecommunications” in order to subject that connection to assessment?

266. *Jurisdictional Considerations.* As discussed above, the current revenues-based system requires contributors to separately account for revenues derived from interstate, intrastate, and international services.<sup>436</sup> The Commission and industry participants have suggested in the past that a connections-based system might mitigate the need to differentiate between interstate and intrastate jurisdictions.<sup>437</sup> We seek comment on whether this remains a relevant consideration.

267. In the connections-based methodology proposed in 2002, the Commission stated that international-only and intrastate-only connections would be exempt because they do not have an interstate component.<sup>438</sup> We seek comment on how specifically we would determine whether a particular connection should be deemed to be intrastate-only for contribution purposes, if we were to adopt a connections-based methodology, and how such a rule could be applied. We note that today, private lines with less than ten percent interstate traffic are deemed to be jurisdictionally intrastate.<sup>439</sup> For contribution purposes, the Form 499 instructions specify that if over ten percent of the traffic is interstate, all of the revenues for that line are classified as interstate.<sup>440</sup> We seek comment above in this Notice on a revenues-based approach that would be simpler to administer, which would allocate revenues to the different jurisdictions according to a set percentage.<sup>441</sup> If we were to adopt a connections-based approach, should we adopt a rule that any connection that provides the capability to originate or terminate communications

---

<sup>434</sup> 2002 First Contribution Methodology Order and FNPRM, 17 FCC Rcd at 3784, para. 71; 2002 Second Contribution Methodology Order and FNPRM, 17 FCC Rcd at 24985, para. 70.

<sup>435</sup> See *supra* Section V.A.1.

<sup>436</sup> See *supra* Section V.A.2.

<sup>437</sup> 2002 First Contribution Methodology Order and FNPRM, 17 FCC Rcd at 3784, para. 71; 2002 Second Contribution Methodology Order and FNPRM, 17 FCC Rcd at 24985, para. 70; see, e.g., USTelecom Nov. 26, 2008 Comments.

<sup>438</sup> 2002 Second Contribution Methodology Order and FNPRM, 17 FCC Rcd at 24987, para. 76.

<sup>439</sup> MTS and WATS Market Structure; Amendment of Part 36 of the Commission's Rules and Establishment of a Joint Board, CC Docket Nos. 78–72, 80–286, Decision and Order, 4 FCC Rcd 5660, 5660, paras. 2, 6 (1989).

<sup>440</sup> See 2010 FCC Form 499-A Instructions at 22.

<sup>441</sup> See *supra* Section V.A.3.

that may cross state lines is subject to assessment, regardless of the physical end points of the facility or the actual traffic carried on a particular circuit?<sup>442</sup>

268. To the extent we exercise our permissive authority to assess broadband Internet access connections, we seek comment on whether such connections should be presumed interstate for purposes of universal service contributions. Should we conclude that any connection that connects to an Internet point of presence should be deemed interstate for federal USF contribution purposes? Would such a rule allow states to assess connections (or revenues associated with connections) to support state universal service funds? Would a connections-based system increase compliance burdens if states continue to employ a revenues-based assessment for state-based funds? What is a simple way to determine jurisdiction for connections in a manner that is fair and competitively neutral, and could such an approach reduce compliance burdens on contributors?

269. *Consumer Impact.* In the past, certain contributors have argued that a connections- or numbers-based contribution methodology would disproportionately impact vulnerable populations, such as low-income consumers and the elderly.<sup>443</sup> How would moving to a connections-based approach change the relative distribution of the contribution burden between enterprise users and consumers, as well as among different types of enterprise users and consumers? Is moving to a connections-based approach where connections are assessed a flat rate (or a flat rate within a tier) fair to low-income consumers and other users on low-cost service plans? Are there modifications that could be made to a connections-based methodology to make the level of assessment fairer to consumers on low-cost service plans? If we were to adopt a connections-based approach, would low-income households be likely to see a contribution pass-through charge for a larger percentage of their monthly telecommunications bill than higher-income households? Would low-volume customers bear an assessment that constitutes a larger percentage of their bill than high-volume users?

## 6. Implementation

270. Implementing a connections-based system would presumably require new data collection and reporting requirements and, at least in the near term, impose additional costs on both filers and USAC to implement new reporting systems. A connections-based system could also present complexities related to compliance and auditing, particularly because connections are not generally reported for other governmental purposes. Further, a move to a connections-based system may affect other programs that currently report on the FCC Form 499, including Interstate TRS, North American Numbering Plan, Local Number Portability, and regulatory fees administration. Finally, a new system would require some period of transition. We seek comment on all these issues below.

271. *Reporting.* We seek comment on how to implement reporting requirements under a connections-based contributions system. Under the existing revenue-based contribution methodology, contributors report to USAC their historical gross-billed, projected gross-billed, and projected collected end-user interstate and international revenues quarterly on the FCC Form 499-Q and their gross-billed and actual collected end-user interstate and international revenues annually on the FCC Form 499-A.<sup>444</sup>

<sup>442</sup> This issue, application of the so-called “10% rule” is the subject of pending appeals. See, e.g., XO Request for Review at 11; Grande Communications Request for Review of Decision of the Universal Service Administrator, WC Docket No. 06-122, at 7-12 (filed Dec. 28, 2009).

<sup>443</sup> See, e.g., Comments of TracFone Wireless, Inc., WC Docket No. 05-337 *et al.*, at 3 (filed Nov. 26, 2008); Reply Comments of TracFone Wireless, Inc., WC Docket No. 05-337 *et al.*, at 2-4 (filed Dec. 19, 2008); Letter from Mitchell F. Brecher, Counsel for TracFone, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 05-337 *et al.*, at 1-3 (filed Dec. 3, 2008).

<sup>444</sup> 47 C.F.R. §§ 54.706(b), 54.709, 54.711. Filers are required to file revisions to FCC Form 499-A by March 31 of the year after the original filing date. See 2012 FCC Form 499-A Instructions at 8.

USAC then bills contributors for their universal service contribution obligations on a monthly basis based on the contributors' quarterly projected collected revenue.<sup>445</sup> Contributors report actual revenues on the FCC Form 499-A, which USAC uses to perform true-ups to the quarterly projected revenue data.<sup>446</sup>

272. How should a connections-based system be implemented? In particular, we seek comment on the specific changes necessary to enable USAC to administer the Fund under a connections-based system. How would contributors report the number and speed or capacity of their connections under a connections-based assessment methodology? For a service-based connections methodology, how should providers report the service type? Should we continue to use a FCC Form 499 or use a different system, and why? What would be the administrative impact of a new reporting system on providers and on USAC as the administrator of the Fund? Could we modify the FCC Form 477 to capture the data necessary for a connections-based system, thus eliminating the need to file separately for contribution purposes? What measures should we take to ensure that providers would not be able to avoid their contribution obligation? To what extent do connections fluctuate due to churn or other factors, and, as a result, how often should providers report their data to ensure the stability and sufficiency of the Fund? Should we limit reporting requirements to twice a year, to coincide with the requirement to report connections data on the FCC Form 477? We seek comment on whether reporting only twice a year would satisfy our proposed goal of a more simplified contribution system. We also seek comment on the potential impact of a six-month reporting interval on periodic adjustments to the per-connection assessment. Would such a reporting schedule provide USAC and the Commission with the data necessary to effectively administer the universal service programs? We specifically seek comment and data on whether it is necessary to monitor individual provider fluctuations through frequent reporting or whether less frequent reporting would suffice.

273. Alternatively, we seek comment on the costs and benefits of reporting at monthly or quarterly intervals. Since a more frequent interval would likely provide a larger number of "snapshots" of a contributor's connection counts over a year, would a more frequent interval provide more accurate data and lead to more stability in the Fund than would a six-month interval? Would a more frequent reporting period make adjustments to the contributions requirements more incremental? Would longer or shorter reporting intervals advantage or disadvantage some types of providers more than others? In 2002, the Commission sought comment on a monthly reporting system under which the contributor would report the number and speed or capacity of their connections at the end of each month on a new FCC Form 499-M. Under that approach the new form would also serve as a contributor's monthly bill. We seek comment on the costs and benefits of such an approach.

274. *Costs Associated with Implementing a Connections System.* We seek comment on contributors' out-of-pocket costs for implementing a new connections-based contribution methodology. Would contributors be able to use their current billing and operating systems to report connections for universal service contributions? If not, what would be the incremental costs associated with modifying billing systems and internal controls and processes to collect and track connections for purposes of reporting and contributing to the Fund? Would contributors have to implement entirely new systems to track the type of data needed to report connections? Does the answer to this question depend on whether the Commission adopts the FCC Form 477 connection categories as opposed to other categories of providers or services whose connections are assessable? Are there cost savings that could be realized by moving away from the current system, which requires contributors to report revenues quarterly (projected) and annually (actual) for USF purposes? Would those costs vary depending on the definition of connections we adopt? We also seek comment on whether the cost of updating billing and internal systems for this regulatory purpose would outweigh any benefit achieved. What would be the

<sup>445</sup> 47 C.F.R. §§ 54.702(b), 54.709(a).

<sup>446</sup> See 47 C.F.R. §54.709.

implications for reporting for other regulatory programs such as regulatory fees, Interstate TRS, and the North American Numbering Plan? Would increased operational costs negatively impact certain carriers more as compared to other carriers (for example, smaller rate of return companies that recover some of these costs from high-cost loop support, which is capped)?

275. We specifically seek comment on any implementation costs associated with other programs that rely on the data reported on the FCC Form 499-A. For example, if we were to move to a connections-based system for contributions, would there be additional costs associated with reporting for the Interstate TRS Fund, North American Numbering Plan, Local Number Portability, and regulatory fees administration programs which currently rely on the FCC Form 499-A data? Would a change in the contribution system to a connections-based approach only be feasible and cost-effective if these other programs also changed to a connections-based approach? We also ask whether adopting a connections-based system would increase compliance burdens if states continue to employ a revenues-based assessment.

276. We also seek to refresh the record on whether there are other costs associated with a connections system, and in particular ask providers if there are any new costs that were not foreseen when we last asked for comments on this methodology. Would the cost of a new assessment methodology increase for certain classes of customers or certain industry segments? To what extent would this analysis change depending on how a connection is defined and assessed? Do the additional costs associated with implementation and reporting requirements outlined below outweigh the benefits of moving to a connections-based methodology?

277. *Auditing.* Audits are an essential tool for the Commission and USAC to ensure program integrity and to detect and deter waste, fraud, and abuse. Among its duties, USAC conducts regular audits of USF contributors to monitor compliance with our contribution reporting rules and requirements. Any new connections methodology must be auditable in order to ensure that contributors are reporting accurately, and that the system operates in an equitable and nondiscriminatory manner, maintains stability in the contribution base, and minimizes market distortions and gamesmanship. Auditing a connections-based system could be difficult, however, if the manner in which providers track their connections for business reasons does not overlap with the Commission's definitions of "connections" and "tiers." As previously noted, unlike revenues, connections are not universally tracked, and thus there are no standards or regular means of auditing a "connection." In addition, unlike revenues, "connections" are not reported to other federal agencies, such as the SEC, nor are connections routinely tracked on a company's books. Because companies would be tracking connections solely or primarily for the Commission, we seek comment on how to structure a connections-based system to be auditable and enforceable. How, in fact, would companies track their connections for USF contribution reporting purposes? Would companies need to create internal records solely for this purpose? How would an auditor verify the accuracy of the internal records, especially in light of customer churn and customer change orders? Because revenue is reported for other governmental purposes there are, to some extent, inherent checks and balances built into a revenues-based system.<sup>447</sup> We seek comment on whether any potential lack of checks and balances under a connections system is a fatal flaw, or if it could be remediated. Proponents of a connections-based system should provide specific details about how contributors would report their data and how auditors could verify the accuracy of connections data reported. In addition to audits, what other steps should be taken under a connections-based system to detect and deter waste, fraud, and abuse?

278. Under the current revenues-based system, filers are required to maintain records and documentation to justify information reported on the FCC Form 499 for five years.<sup>448</sup> These include

<sup>447</sup> See, e.g., Department of Treasury, Internal Revenue Service Form 1120 - U.S. Corporation Income Tax Return; Securities and Exchange Commission, Form 10-K Annual Report, 15 U.S.C. §§ 78m or 78o(d).

<sup>448</sup> 47 C.F.R. §54.706(e).

financial statements and supporting documentation, accounting records, historical customer records, and general ledgers, which companies generally retain for other purposes, not just compliance with the USF contribution rules and requirements.<sup>449</sup> Filers must make available all documents and records, including those of contractors and consultants working on their behalf, to the Commission or to USAC, and to auditors upon request.<sup>450</sup> In addition, providers track and retain financial information for other regulatory programs that carry criminal and/or monetary sanctions for inaccurate filings.<sup>451</sup> In contrast, other than the Commission's FCC Form 477, there are no other regulatory programs that we are aware of that require providers to collect and report connections, and the FCC Form 477 filing requirements do not carry financial penalties for inaccurate reporting.<sup>452</sup> We seek comment on how, under a connections-based system, we could create the proper incentives for providers to accurately report connections data. What types of procedures are necessary to verify the accuracy of the number of connections reported by a provider? How would USAC measure the accuracy of the data, especially given customer churn that may occur between reporting periods?

279. *Effect on Other Programs.* As in previous comment cycles, we ask parties to provide comment on the impact of moving to a connections-based approach on the Interstate TRS, North American Numbering Plan, Local Number Portability, and regulatory fees administration programs.<sup>453</sup> The revenue information currently reported on an annual basis in FCC Form 499-A is also used to calculate assessments for these programs.<sup>454</sup> As in previous comment cycles, we ask parties to provide comment on the best approach for ensuring proper funding of these programs were we to move to a connections-based methodology.<sup>455</sup> Should contributors continue reporting gross billed end-user revenues for purposes of these programs, and if so, should they continue to report on an annual basis? Could we dramatically simplify the FCC Form 499 for purposes of revenue reporting in that instance, such as by eliminating the multi-line breakout of reported revenues into sub-categories? We specifically seek comment on whether to maintain revenue-based reporting for the regulatory fee program if we move to a connections-based approach for USF contributions and/or the other programs.

280. If we were to adopt a connections-based approach for the USF, should we also move to a connections-based approach for Interstate TRS, North American Numbering Plan, Local Number Portability, and regulatory fees administration programs? If so, would a connections-based approach for these programs vary, if at all, from a connections-based approach for the USF? We specifically seek comment on how a connections-based system could be implemented to satisfy the requirements of section 715 of the Act. This section requires that each interconnected VoIP service provider and each provider of non-interconnected VoIP service shall participate in and contribute to the Interstate Telecommunications Relay Services Fund in a manner "consistent with and comparable to the obligations of other contributors

---

<sup>449</sup> *Id.*

<sup>450</sup> 47 C.F.R. § 54.711(a).

<sup>451</sup> Providers must keep financial records for tax purposes. *Cf.* 26 U.S.C. § 6662 (imposing penalties for "substantial understatement" of income tax), 18 U.S.C. § 1520 (providing criminal penalties for corporations that fail to keep audit records for five years). Additionally, a number of states have regulatory programs that require providers to file regular reports and provide for penalties if reports are inaccurate. *See e.g.*, N.Y. Pub. Serv. Law § 95; 52 Pa. Code § 63.36.

<sup>452</sup> 47 C.F.R. § 0.111. We note, however, that failure to comply with the Commission's reporting rules could subject an entity to the enforcement provisions of the Act. *See* 47 U.S.C. § 503.

<sup>453</sup> 2001 Contribution Methodology Notice, 16 FCC Rcd at 9909, para. 38.

<sup>454</sup> *See* 47 C.F.R. §§ 159(a), 159(b)(1)(A), 159(g), 52.17, 52.32(b), 64.604(c)(5)(iii)(B).

<sup>455</sup> *See* 2001 Contribution Methodology Notice, 16 FCC Rcd at 9909, para. 38.

to such Fund.”<sup>456</sup> Finally, are there alternative ways to calculate contributions for the Interstate TRS, North American Numbering Plan, Local Number Portability, and regulatory fees programs?

281. *Transition.* A connections-based methodology would constitute a substantial change from the current *revenue*-based system and would likely require a transition period, especially if reporting entities need to implement new billing and accounting systems and a process for recording connection counts in a manner that is auditable. We seek comment on what steps would need to be taken to transition between the current revenues-based system and a connections-based system and how much time would be needed to ensure that the new process is applied in an equitable manner.

282. If we were to adopt a connections-based methodology, the Commission and USAC would likely need to go through multiple reporting cycles to determine whether information is being reported consistently and to determine whether contributors understand what information they are being asked to report. In addition, contributors and USAC would need time to update their billing and tracking systems to accommodate the new methodology. Is a one-year transition period sufficient to ensure that all affected parties would have adequate time to address any implementation issues that arise? How much time would be necessary for contributors, including new contributors, to adjust their record-keeping and reporting systems in order to comply with new reporting procedures? Are there new considerations that would favor a longer or shorter transition period? Would there be a benefit in adopting different transition periods for residential and business markets?

283. We also seek comment on the value of requiring dual reporting during all or some of the transition time – where reporting entities would continue to report and pay under the current revenues-based system, while they also begin reporting under the new system. Would having providers report under both systems for a specified amount of time during the transition provide the opportunity for both providers and USAC to address unforeseen implementation issues that are likely to arise under the new reporting system? Should new filers begin reporting sooner since USAC does not have any historical data on their revenues and services?

### **C. Assessing Contributions Based on Numbers**

284. In this section, we seek comment on moving away from the current revenues-based contribution system and adopting a numbers-based contribution methodology. The Commission has explored a numbers-based methodology in the past, including as recently as 2008, when it sought comment on using telephone numbers as the basis for a new contributions system.<sup>457</sup> We seek to refresh the record given developments in technology and communications.

285. Under a numbers-based system, in its simplest form, providers would be assessed based on their count of North American Numbering Plan (NANP) phone numbers. There would be a standard monthly assessment per phone number, such as \$1 per month, with potentially higher and lower tiers for certain categories of numbers based on how these numbers are assigned or used. The monthly assessment per number would be calculated by applying a formula based on the USF demand requirement and the relevant count of numbers, however that term is defined. This contribution factor would no longer be based on revenues.

286. In 2002, the Commission first sought comment on replacing the existing revenues-based methodology with a system that would assess providers on the basis of telephone numbers assigned to end users (assigned numbers), while assessing special access and private lines that do not have assigned

---

<sup>456</sup> 47 U.S.C. § 616.

<sup>457</sup> See 2002 Second Contribution Methodology Order and FNPRM, 17 FCC Rcd at 24995, para. 96; 2008 Comprehensive Reform FNPRM, 24 FCC Rcd at 1639, para. 40.